IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

APERTURE NET LLC, Plaintiff, v. CAMBIUM NETWORKS, INC., Defendant.	Civil Action No. 21-298-RGA

MEMORANDUM OPINION

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ANDREWS, UNITED STATES DISTRICT JUDGE:

Before me is Defendant's motion to dismiss for failure to state a claim. (D.I. 12). Defendant Cambium Networks argues Plaintiff Aperture Net's First Amended Complaint (D.I. 11) fails to state a claim of direct infringement and contributory infringement. The issue has been fully briefed and I have reviewed the parties' briefing and supplemental materials. (D.I. 13, 17, 19, 20).

I. BACKGROUND

Aperture alleges Cambium has directly and indirectly infringed claims 25 and 26 ("the Asserted Claims") of U.S. Patent No. 6,711,204 ("the '204 patent"). The '204 patent is directed toward an improvement in spread-spectrum code-division-multiple-access ("SS-CDMA") wireless communication systems. SS-CDMA systems use spread-spectrum modulation to allow a single communication channel to service multiple users at once. (D.I. 11-1 at 3:34-41). The claimed SS-CDMA system involves a base station communicating with a plurality of remote stations. Examples of remote stations can include mobile phones, computers, or laptops. (*Id.*). One potential issue with SS-CDMA systems is that, because remote stations can be located at various distances from the base station, the remote stations' respective signals may arrive at the base station at different power levels. (D.I. 11-1 at 3:53-60). This variation in power levels can cause interference when the stronger signals from closer remote stations block or inhibit reception of weaker signals from more distant remote stations. (*Id.*). The asserted claims disclose a method for controlling the power transmitted from remote stations ("RS") to base stations ("BS") "so that the power received at the base station from each remote station is approximately the same." (D.I. 11-1 at 3:65-67; 4:1).

The method disclosed in claim 25 describes three distinct categories of signals: (1) signals transmitted from the base station at a first frequency, (2) signals transmitted from a plurality of

remote stations and received at the base station at a second frequency, and (3) a "BS-channel-sounding signal" transmitted from the base station and received by the remote stations at the second frequency. The remote stations use the BS-channel-sounding signal to adjust the power level of their respective signals.

Claim 25 reads:

> An improvement to a spread-spectrum method having a base station and a plurality of remote stations (RS), comprising the steps of:
>
> > transmitting, from said base station, a plurality of BS-spread-spectrum signals at a first frequency;
> >
> > transmitting, from said plurality of remote stations, a plurality of RS-spread-spectrum signals;
> >
> > receiving, at said base station, at a second frequency, the plurality of RS-spread-spectrum signals transmitted from said plurality of remote stations, respectively;
> >
> > transmitting, from said base station, a BS-channel-sounding signal at the second frequency;
> >
> > receiving, at said plurality of remote stations, the BS-channel-sounding signal at the second frequency; and
> >
> > adjusting, at said plurality of remote stations, responsive to the BS-channel-sounding signal, an initial RS-power level of said plurality of remote stations.

Claim 26 is a dependent claim that discloses the method from claim 25 such that the BS-spread-spectrum signals at the first frequency are outside a "correlation bandwidth" of the RS-spread signals transmitted by the remote stations at the second frequency.

Claim 26 reads:

> The improvement as set forth in claim 25, with the step of transmitting the plurality of BS-spread-spectrum signals including the step of transmitting the plurality of BS-spread-spectrum signals at the first frequency outside a correlation bandwidth of the plurality of RS-spread-spectrum signals transmitted by the plurality of remote stations at the second frequency.

II. LEGAL STANDARD

When reviewing a motion to dismiss pursuant to Federal Rule of Civil Procedure 12(b)(6), the Court must accept the complaint's factual allegations as true. *See Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555–56 (2007). Rule 8(a) requires "a short and plain statement of the claim showing that the pleader is entitled to relief." *Id.* at 555. The factual allegations do not have to be detailed, but they must provide more than labels, conclusions, or a "formulaic recitation" of the claim elements. *Id.* ("Factual allegations must be enough to raise a right to relief above the speculative level . . . on the assumption that all the allegations in the complaint are true (even if doubtful in fact)."). Moreover, there must be sufficient factual matter to state a facially plausible claim to relief. *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009). The facial plausibility standard is satisfied when the complaint's factual content "allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged." *Id.* ("Where a complaint pleads facts that are merely consistent with a defendant's liability, it stops short of the line between possibility and plausibility of entitlement to relief." (cleaned up)).

III. DISCUSSION

A. Direct Infringement

Direct infringement of a method claim occurs "where all steps of a claimed method are performed or attributable to a single entity." *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 797 F.3d 1020, 1022 (Fed. Cir. 2005). The sale or manufacture of an accused device that performs each step of the patented method is insufficient for a showing of direct infringement – actual performance of the claimed process is required. *Ericsson, Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201, 1221 (Fed. Cir. 2014). Alleging that a specific product meets "each and every element of at

least one claim" of an asserted patent is sufficient to plead direct infringement. *Disc Disease Sols. Inc. v. VGH Sols., Inc.*, 888 F.3d 1256, 1260 (Fed. Cir. 2018).

The method disclosed in claim 25 of the '204 patent requires the following elements: (1) a base station, (2) remote stations, (3) the transmission of a plurality of BS-spread-spectrum signals from the BS at a first frequency, (4) RS-spread-spectrum signals transmitted from the RSs and received by the BS at a second frequency, (5) transmission of a BS-channel-sounding signal from the BS at the second frequency, (6) reception of the BS-channel-sounding signal at the RSs and power-level adjustment by the RSs in response to the channel-sounding signal.

Here, Aperture claims that Cambium's cnPilot E400 ("the Accused Product"), a wireless hotspot, infringes claim 25 when used to provide Wi-Fi to smartphones, laptops, and other devices. Aperture's claim chart, incorporated by reference into the First Amended Complaint (D.I. 11 at ¶ 16), identifies the Accused Product as the claimed base station and the computer devices to which it connects as the claimed remote stations, satisfying elements 1 and 2. (D.I. 11-2 at 2). When the Accused Product is in use, both the base station and the remote station(s) are under the control of a single user. The claim chart roughly describes the following process:

(1) The accused product transmits a plurality of BS-spread spectrum signals (beacon frames) "at a first frequency," satisfying element 3. (*Id.*).

(2) These beacon frames contain connection parameters which enable mobile stations to connect to the BS, including the channel frequency to be used for communication between the BS and the RSs. (*Id.*). Presumably, this "measured" channel frequency is different than the frequency of the initial beacon frames, although Aperture does not expressly state this in its claim chart. (*See Id.*).

(3) The RSs connect to the network and start communicating with the BS using this second frequency, satisfying element 4. (*Id.* ("Once the frequency measurement is complete, both the uplink and downlink communication takes place on the measured frequency.")).

(4) "The base station transmits beacon frames (sounding signals) to the devices nearby at the second frequency (measured/calculated frequency used for the uplink communication)," satisfying element 5. (D.I. 11-2 at 14).

(5) "The Power Constraint element included in the beacon frames allows a device (trying to connect to the base station) to determine the local maximum transmit power in the current channel" and to adjust its power level accordingly, satisfying element 6. (*Id.*).

Cambium argues that the claim chart does not properly allege infringement because "beacon frames" are used to describe the BS-spread-spectrum signals, the RS-spread-spectrum signals, and the BS-channel-sounding signal, despite the requirement that these are three distinct signals and the first signal must be at a different frequency than the latter two. (D.I. 13 at 9-12). Cambium does not explain, however, why the first set of beacon frames sent out by the Accused Device containing the initial connection parameters cannot be different than the second set of beacon frames sent out at the second frequency acting as channel-sounding-signals. Whether the beacon frames Aperture identifies as the first signal and the beacon frames Aperture identifies as the second and third signals are in fact different signals and, if they are, whether they operate at different frequencies as required by the claims, are factual questions. As such, they are not appropriate for resolution at the motion to dismiss stage. For now, Aperture has plausibly pled direct infringement by users of the Accused Device by alleging that the Accused Device performs all the steps of the claimed method.

Cambium also argues that the IEEE 802.011 Wi-Fi standard that Aperture claims defines "[t]he frequency used for the communication between the BS and the plurality of RS" (D.I. 11-2 at 2) does not cover channel-sounding signals. (D.I. 13 at 11). This argument, too, presents a dispute that is premature at the motion to dismiss stage.

For the reasons stated above, I find that Aperture has plausibly alleged that use of the Accused Product directly infringes the Asserted Claims. Aperture's allegation that Cambium directly infringed "by having its employees internally test and use, research and develop, and troubleshoot" the Accused Product is therefore sufficient to plausibly state a claim of direct infringement by Cambium. (D.I. 11 at ¶ 14). Here, like in *Sapphire Crossing*, Aperture's admittedly brief allegation relating to internal testing is sufficient because it is "augmented" by Aperture's claim chart, which explains how use of the Accused Device directly infringes the '204 patent. *Sapphire Crossing LLC v. Robinhood Markets, Inc.*, 2021 WL 149023, at *3 (D. Del. Jan. 15, 2021). Therefore, Cambium's motion to dismiss Aperture's claim of direct infringement by Cambium is DENIED.

B. Contributory Infringement

Aperture alleges that Cambium indirectly infringes the '204 patent by selling the Accused Product with the "knowledge that third parties, such as its customers, would engage in an infringing use" of the device. (D.I. 11 at ¶ 18). Aperture alleges that, because the Accused Device adheres to the IEEE 802.011 standard (which Aperture claims "necessarily" infringes the '204 patent as demonstrated in its claim chart), the Accused Device has no substantial non-infringing uses. (*Id.* at ¶ 19).

To state a claim of contributory infringement, a plaintiff must first demonstrate direct infringement. *In re Bill of Lading Transmission & Processing Sys. Pat. Litig.*, 681 F.3d 1323, 1336

(Fed. Cir. 2012). Once direct infringement is shown, contributory infringement occurs if (1) "a party sells or offers to sell" an infringing device, (2) the device is "material to practicing the invention," (3) the device has no "substantial non-infringing uses," and (4) the device is "known by the party to be especially made or especially adapted for use in an infringement of such patent." *Id.* at 1337 (cleaned up). To demonstrate the fourth prong, the plaintiff must show the infringer knew "that the combination for which its components were especially made was both patented and infringing." *Fujitsu Ltd. v. Netgear Inc.*, 620 F.3d 1321, 1330 (Fed. Cir. 2010) (cleaned up). In other words, the plaintiff must plausibly plead that the alleged infringer had knowledge of the patent and knowledge that use of the accused product infringes the patent.

Here, Aperture has plausibly pled direct infringement by end users of the Accused Device, that Cambium sold or offered to sell the Accused Device, and that the Accused Device is material to practicing the claimed method. (D.I. 11 at ¶¶ 13, 15, 18). Aperture has also plausibly pled that the Accused Device has no substantial non-infringing uses by alleging that the device adheres to the IEEE 802.011 standard and alleging, as demonstrated in its claim chart, that the IEEE 802.011 standard "necessarily" infringes the Asserted Claims. (D.I. 11 ¶ 19; *see* D.I. 11-2). Cambium's arguments regarding how the IEEE 802.011 standard relates to the presence or absence of substantial non-infringing uses are factual disputes, inappropriate for resolution here. (D.I. 13 at 13-15).

Aperture has not, however, plausibly pled that Cambium had pre-suit knowledge of the Accused Patents. The vague facts Aperture alleges to show knowledge of the '204 patent (*e.g.*, that the '204 patent's inventor had "a substantial foundational body of work with which Defendant was indisputably aware," that Defendant conducted prior art searches and freedom to operate analyses, that Defendant's own patents "demonstrate a knowledge of the body of spread-spectrum

patents") are insufficient to plausibly allege pre-suit knowledge. (D.I. 11 at ¶ 20). Aperture's argument in the alternative, regarding willful blindness, is even weaker. (*Id.* at ¶ 20(d)). Aperture does not plead any specific facts to show Cambium (1) subjectively believed there was a high probability its components were both patented and infringing and (2) took deliberate actions to avoid learning that fact. (*Id.*; *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 769 (2011)).

For these reasons, Cambium's motion to dismiss for failure to state a claim of pre-suit contributory infringement is GRANTED. Cambium's motion to dismiss for failure to state a claim of post-suit contributory infringement[1] is DENIED.

IV. CONCLUSION

For the reasons stated above, Defendant's motion to dismiss is DENIED with respect to Aperture's claim of direct infringement. Defendant's motion to dismiss is GRANTED with respect to Aperture's claim of pre-suit contributory infringement and DENIED with respect to Aperture's claim of post-suit contributory infringement.

An appropriate order will issue.

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[1] I take judicial notice of the fact that Aperture's First Amended Complaint can operate to plead the knowledge of the patent element of indirect infringement since the filing of its original complaint. *Wrinkl, Inc. v. Facebook, Inc.*, 2021 WL 4477022, at *7 (D. Del. Sept. 30, 2021).

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ORDER

For the reasons stated in the accompanying Memorandum Opinion, the motion to dismiss for failure to state a claim (D.I. 12) is GRANTED IN PART and DENIED IN PART. The claim of pre-suit contributory infringement of the '204 patent is DISMISSED.

IT IS HEREBY ORDERED.

Entered this 1st day of February 2022.

United States District Judge